

## ABSTRACT

The object of the present invention is to provide novel enone reductases useful for producing ketones. Accordingly, novel enone reductases derived from the genus *Kluyveromyces* are provided by the present invention. In addition, the present invention also provides genes encoding the enzymes and vectors containing the genes, as well as transformants. Furthermore, the present invention provides enone reductases derived from yeast. Methods for selectively reducing the carbon-carbon double bonds of  $\alpha,\beta$ -unsaturated ketones using these enone reductases are provided. Ketones useful as a raw material for pharmaceuticals can be produced based on an enzymatic reaction.

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